

WHAT IS CLAIMED IS:

1. A plasma display panel of AC type including a front panel provided with display electrodes and a rear panel provided with address electrodes, for displaying an image by causing discharge in the discharge gas space formed between the front and rear panels;

wherein the display panel is provided with a protective film made of metallic oxide covering the dielectric layer placed on the front panel;

wherein the protective film is formed into a structure where columnar structures are densely packed, closely with each other, extending perpendicularly to the interface between the dielectric layer and the protective film; and more than 400 columnar structures are formed per the substrate area of $1 \mu\text{m}^2$

2. A plasma display panel according to Claim 1, wherein the number of the columnar structures formed per the substrate area of $1 \mu\text{m}^2$ is more than 500.

3. A plasma display panel according to Claim 1, wherein the columnar structures are formed into a series of crystal structures from the interface with the substrate to the film

4. A plasma display panel according to Claim 1, wherein the metallic oxide is magnesium oxide

5. A plasma display panel according to Claim 1, wherein the film thickness to be formed as the protective film is less than 300 nm

6. A plasma display panel according to Claim 1, wherein
the film to be formed as the protective film is structured
with one or more crystal axes, selected among a group of
<111>, <220>, <100> and <311>, along the normal on the
substrate surface.

5

206070-4444